



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,631	07/30/2003	Kouichi Anno	501.42963X00	9122
20457 7590 06/19/2007 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			EXAMINER TON, MINH TOAN T	
			ART UNIT 2871	PAPER NUMBER
			NOTIFICATION DATE 06/19/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

officeaction@antonelli.com  
dprater@antonelli.com  
tsampson@antonelli.com



Art Unit: 2871

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 8-9 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Urabe et al (US 6476889).

Urabe discloses a common transfective LCD device comprising (see at least Figure 3)): a substrate, a first pixel electrode formed of a light transmissive conductive layer formed in one optical transmissive region (e.g., 115) which is formed by partitioning the pixel region; a second pixel electrode formed of a non-light transmissive conductive film is formed on the remainder of the partitioned pixel reflective region (e.g. 8); the first pixel electrode positioned as a lower layer with respect to an insulation film (e.g., 114) and a hole (e.g., 112) is formed in the insulation film in a region corresponding to the light transmissive region so as to expose the first pixel electrode, and the second pixel electrode is formed on a light reflective region of the insulation film; at least a portion corresponding to a side wall surface of the hole formed in the insulation film is arranged in relation to a light shielding film (e.g., BM).

Urabe discloses a transfective LCD device comprising a light shielding means (e.g., BM) disposed on one of a pair of substrates and at least arranged in relation/at least overlapping

Art Unit: 2871

with at least a portion corresponding to a side wall surface of the hole (e.g. 112) formed in the insulation film (e.g., 114) (see at least Figure 3).

Urabe discloses the contact hole (e.g., 112) formed close to the switching element TFT (e.g., 108) (see at least Figure 3).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urabe et al as applied to claims 1, 3, 8-9 and 12.

Materials such as metal are common and known in the art for bus lines, light shielding means. Forming the shielding means and the bus (gate/data) lines of the same material is also common and known in the art for advantages such as cost-reduction. Therefore, it would have been at least obvious to one of ordinary skill in the art to employ the light shielding means and the gate lines made of the same material, as common and known in the art, for advantages such as cost-reduction.

The light shielding means disposed on one of the pair of substrates is common and known as at least art-recognized functionally equivalent (i.e., not patentably distinct to each other) to the light shielding means disposed on another of the pair of substrates. Further, disposing below the

Art Unit: 2871

second pixel electrode (i.e., on the TFT substrate) would further achieve advantages such as protecting the TFT from damaging. Therefore, it would have been at least obvious to one of ordinary skill in the art to form the light shielding means adjacent to the switching element (TFT) (i.e., below the second pixel electrode) for achieving further advantages such as protecting the TFT from damaging

### *Response to Arguments*

3. Applicant's arguments filed 03/19/07 have been fully considered but they are not persuasive.

Applicant appears to contend that the light shielding film of the present invention is disposed on the same substrate as the pixel electrode or the insulation film, as shown at least in Figure 2 of the present invention. Thus Urabe (the prior art of record used in the rejection) fails to disclose limitations such as 'at least a portion corresponding to a side wall surface of the hole formed in the insulation film is arranged in relation to a light shielding film'.

However, it is noted that the features upon which applicant relies (e.g., the light shielding film IL of the present invention is disposed on the same substrate as the pixel electrode or the insulation film, as shown in at least Figure 2) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims; 'arranged in relation to' can be broadly interpreted to have *any* particular relationship. As presently claimed, Urabe discloses 'at least a portion corresponding to a side wall surface of the hole formed in the insulation film is arranged in relation to a light shielding film'.

Art Unit: 2871

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 06, 2007 .

TOAN TON  
PRIMARY PATENT EXAMINER